

STORAGE VOLUME PROVIDED = 283,043 CF

PRELIMINARY FOR FABRICATION OR CONSTRUCTION

4	.	.	.	.	.
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2	.	.	.	.	.
1	04/28/07	PRELIMINARY / PROPOSAL DRAWINGS	YAH	.	.
NO.	DATE	DESCRIPTION	DRAWN BY	APPROVED BY	

- NOTE:
1. LOCATION OF ALL MANHOLES, STUBS, INLETS, TO BE SPECIFIED BY PROJECT ENGINEER OF RECORD PRIOR TO FABRICATION.
  2. ALL RECOMMENDED REINFORCING ON THE SYSTEM WILL BE DESIGNED BY MANUFACTURER TO CONFORM TO ASTM A998 AFTER PURCHASE. ORDER IS ISSUED.

TBD = TO BE DETERMINED

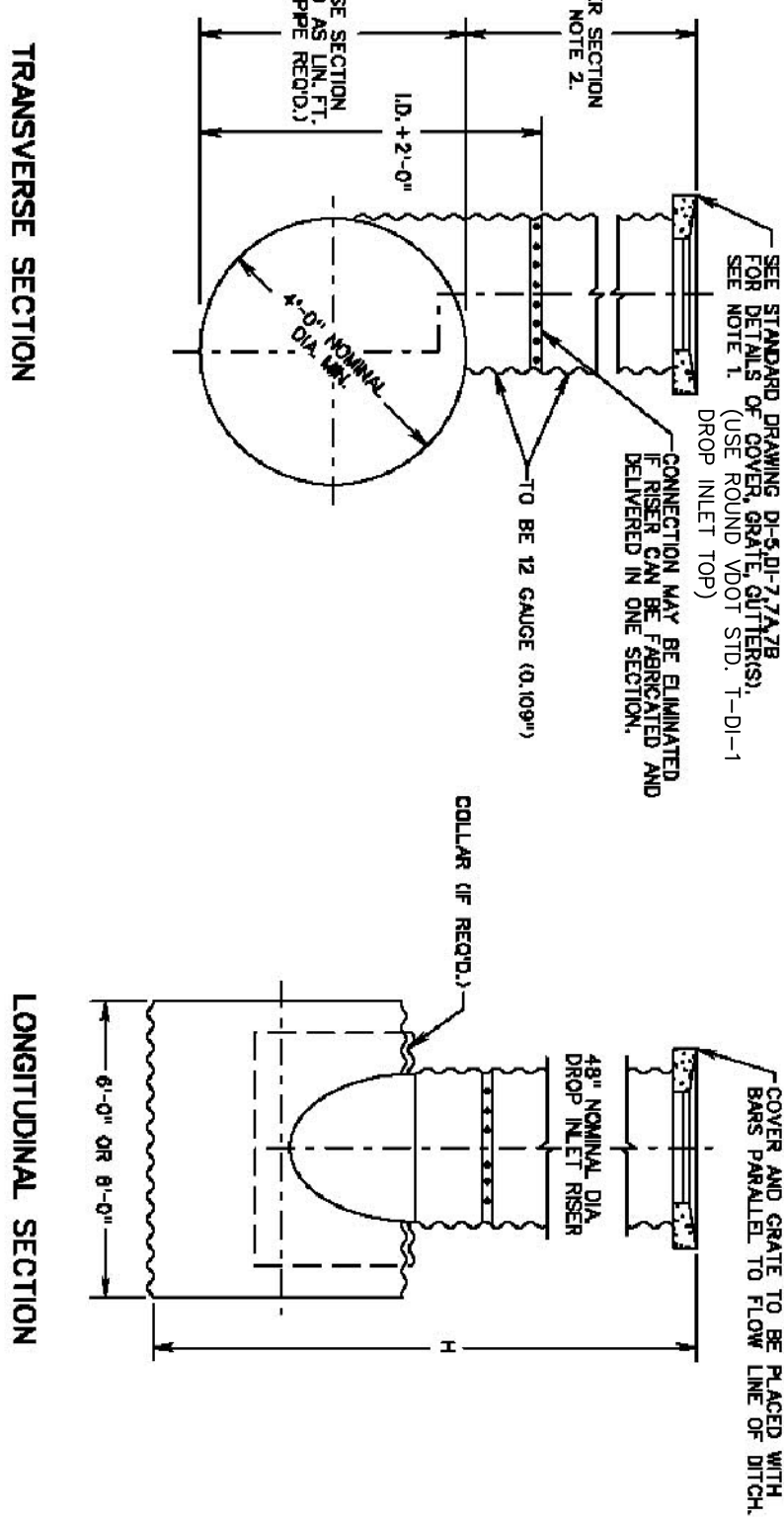
CONTECH ID# 107384

**CONTECH**  
SOLUTIONS™  
MANUFACTURING, DESIGN AND CONSTRUCTION OF DETENTION SYSTEMS

THIS PRINT IS OWNED BY CONTECH SOLUTIONS, INC. AND IS NOT TO BE REPRODUCED OR TRANSMITTED IN ANY FORM OR BY ANY MEANS, ELECTRONIC OR MECHANICAL, WITHOUT PERMISSION IN WRITING FROM CONTECH SOLUTIONS, INC.

**SHEET TITLE**  
138" Ø UNDERGROUND DETENTION SYSTEM  
FIRST & MAIN NORTH BASIN  
BLACKSBURG, VA

DATE: 07/26/07  
DRAWN BY: YAH  
CHECKED BY: [blank]  
SCALE: 1" = 10'-0"



TRANSVERSE SECTION

LONGITUDINAL SECTION

NOTES:

1. OTHER STANDARD GRATES OR DROP INLET THROAT SECTIONS MAY BE SUBSTITUTED WHEN SPECIFIED ON PLANS.
2. RISER SECTION PAD AS STANDARD DROP INLET OR LK-FT. OF MANHOLE DEPENDING ON USE OF STRUCTURE.
3. THE TEE UNIT IS TO BE FABRICATED FOR DELIVERY TO THE CONSTRUCTION SITE AS A COMPLETE UNIT. AND DELIVERY OF MANHOLE TO THE CONSTRUCTION SITE AS A COMPLETE UNIT. THE TEE UNIT IS TO BE FABRICATED FOR DELIVERY TO THE CONSTRUCTION SITE AS A COMPLETE UNIT. AND DELIVERY OF MANHOLE TO THE CONSTRUCTION SITE AS A COMPLETE UNIT. THE TEE UNIT IS TO BE FABRICATED FOR DELIVERY TO THE CONSTRUCTION SITE AS A COMPLETE UNIT. AND DELIVERY OF MANHOLE TO THE CONSTRUCTION SITE AS A COMPLETE UNIT.
4. WHEN REQUIRED, CONNECTION BETWEEN DROP INLET RISER AND TEE UNIT MAY BE BOLTED OR WELDED.

**CORRUGATED METAL TEE SECTION**  
MAX. DEPTH (H) 25'

VIRGINIA DEPARTMENT OF TRANSPORTATION

103.13

302

ACCESS HATCH DETAIL

**ANDERSON & ASSOCIATES, INC.**  
Professional Design Services  
www.andassoc.com  
Virginia - North Carolina - Tennessee

100 Ardmore St.  
Blacksburg, Va. 24060  
540-552-5592

DATE: 24 JUL 07  
DESIGNED: CONTECH  
DRAWN: CONTECH  
CHECKED: MTC

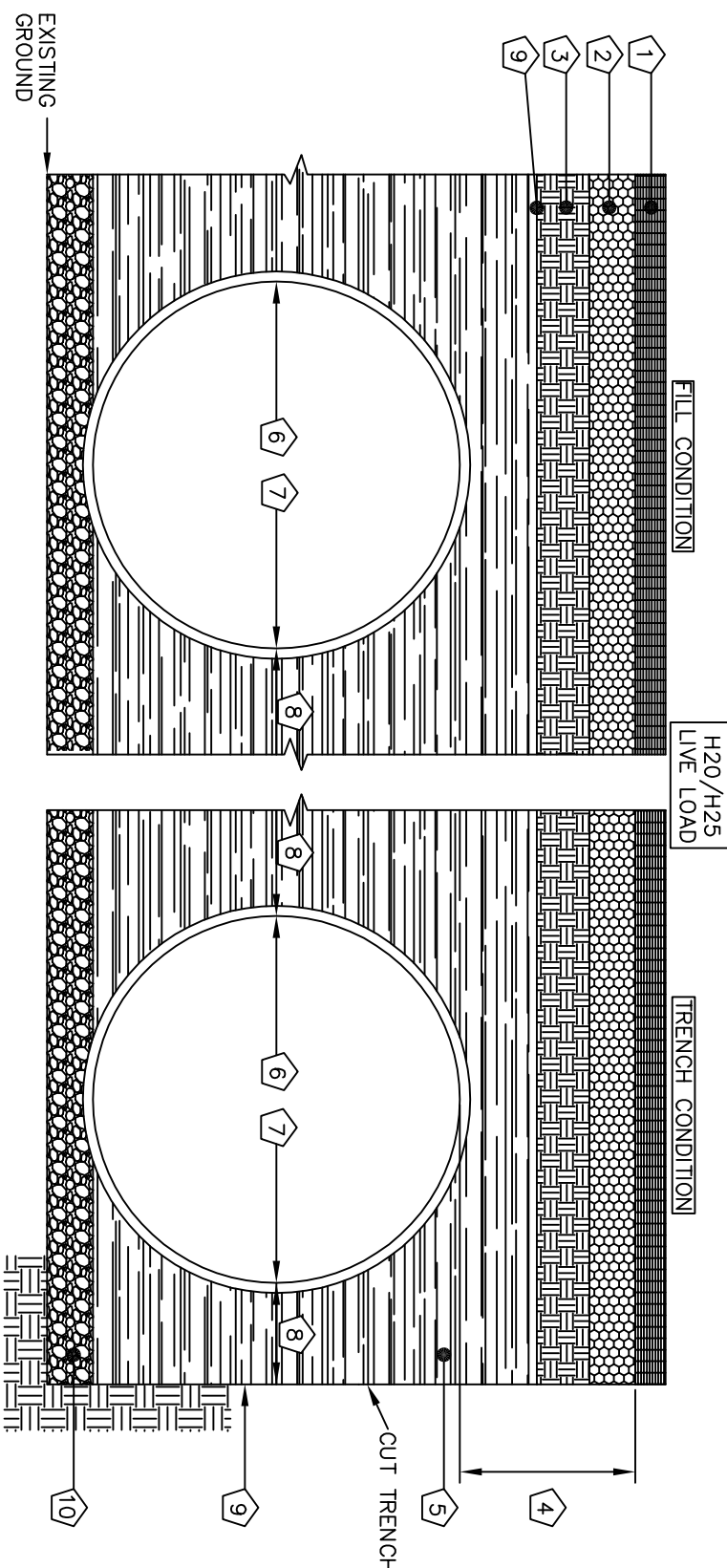
REV. # COMMENTS DATE

**FIRST & MAIN**  
PHASE 1  
BLACKSBURG, VIRGINIA

**GRADING & DRAINAGE**  
DETAILS 2

DOCUMENT NO. 22559 - 210  
SHEET C2.19

TOWN ENGINEER	DATE
TOWN PLANNER	DATE



- 1) RIGID OR FLEXIBLE PAVEMENT
- 2) GRANULAR ROAD BASE
- 3) NORMAL ROADWAY EMBANKMENT FILL TO MIN. 90% STANDARD DENSITY PER AASHTO T-99.
- 4) 12" MIN. FOR DIAMETERS THROUGH 96" AND UP MEASURED FROM TOP OF RIGID OR BOTT. OF FLEXIBLE PAVEMENT.
- 5) SELECT GRANULAR FILL PER AASHTO M45 A-1, A-2 OR A-3 OR APPROVED EQUAL. (COMPACTED TO MIN. 90% STANDARD DENSITY PER AASHTO T-99)
- 6) 12" THRU 84" 2 2/3" X 1/2" CSP, GAGE PER AASHTO SECTION 12.

- 7) 54" THRU 144" 3" X 1" OR 5" X 1" CSP GAGE PER AASHTO SECTION 12.
- 8) STANDARD SPACING IN TABLE, SPECIAL SPACING IS SUBJECT TO APPROVAL BY CONTECH SOLUTIONS, INC. AND NSCPA GUIDELINES.
- 9) CONTECH C40 NON-WOVEN GEOTEXTILE AS REQUIRED TO PREVENT SOIL MIGRATION.
- 10) RELATIVELY LOOSE GRANULAR BEDDING, ROUGHLY SHAPED TO FIT BOTTOM OF PIPE. 6" IN DEPTH, 18" OR 24" OR OTHER SUITABLE GRANULAR.

DIAMETER	REQUIRED SPACING
UP TO 24"	12"
24" - 72"	1 1/2" PIPE DIA
72" AND UP	36"

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SCALE: 1" = 10'-0"

2 H-12 HUGGER BAND DETAIL

SCALE: N.T.S.

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1. REFER TO CONTECH BAND SELECTION GUIDE FOR BAND WIDTH, GAGE, AND FASTENER TYPES.
2. BANDS FOR PIPE-ARCH ARE THE SAME AS FOR EQUIVALENT DIAMETER ROUND PIPE.
3. BANDS ARE NORMALLY FURNISHED AS FOLLOWS:  
54" THRU 48" 1-PIECE  
54" THRU 96" 2-PIECE  
102" THRU 144" 3-PIECES.
4. BAND FASTENERS ARE ATTACHED WITH SPOT WELDS, RIVETS OR HAND WELDS. ALL ALUMINUM BANDS, BOTH SINGLE AND DOUBLE BANDS, ARE FURNISHED WITH A 1/4" GAGE ALUMINUM BACK-UP PLATE WELDED TO THE BAND AND THE STRAP.
5. REELED ANNUAL END CORRUGATIONS ARE NORMALLY 2'-0 3/4" X 1/2" DIMENSIONS ARE SUBJECT TO MANUFACTURING TOLERANCES.
6. ORDER SHALL DESIGNATE GASKET OPTION.

